COUGHLIN PORTER LUNDEEN

June 23, 1995

Christel F. Holm Douglas Management Company P.O. Box 3757 Seattle, WA 98124-3757

RE: Warehouse at 7100 2nd Ave SW

Structural Investigation Findings

Dear Christel:

Based on your letter dated June 16, and our Proposal dated June 23, we have performed a cursory site visit to the property in question to review the structural integrity of the rigid frame foundation ties.

The property in question is located at 7100 2nd Ave SW in Seattle. The warehouse structure is currently unoccupied. The structure is actually two buildings constructed side-by-side. Each building is approximately 60 feet wide by 100 feet long. Based on a conversation with Lester Candee, the original building was constructed in the mid-fifties. This portion of the warehouse consists of heavy timber columns supporting glue-laminated roof beams. The roof structure consists of 2x12 timber roof joists supporting plywood sheathing. There are large door openings on the West and South sides. The exterior walls are constructed of timber stud walls with metal panel siding.

The second portion of the warehouse was added to the original building approximately 20 years ago. This addition is constructed of steel columns and roof beams which form rigid frames in the north/south direction. The roof consists of steel purlins supporting metal deck. At the interface of the two buildings, the older timber portion was bolted to the newer steel portion at the roof level.

Lateral forces induced by wind and earthquakes are resisted by two different systems. In the north/south direction, lateral forces are resisted by the action of the steel rigid frames. In the east/west direction, the lateral forces are reacted by the metal panel exterior cladding system acting as shearwalls.

In a letter dated June 5, 1995, Mr. Jay Spearman expressed concern that two trenches excavated within the last 5 years may have eliminated steel cross-ties of the north/south rigid frames buried in the concrete slab floor. Elimination of these ties (if any exist), could affect the performance and stability of both the vertical and lateral load carrying systems. The trench on the South side of the building has no impact on the structural integrity of the building as it occurs in the older timber portion the warehouse. Our site inspection indicates that no steel was apparently cut in the trench on the North side of the warehouse. As such, the structure is *not* subject to any of the concerns expressed by Mr. Spearman in his letter.

Based on our cursory inspection of the buildings, the structure does not pose any immediate Life-Safety hazards and may continue to function adequately for its intended use. However, based on the construction materials, the vintage of the buildings, the number of large door openings, and the general condition of the structure, it is apparent that the structure does not meet current seismic code requirements. Because of this, the structure could sustain substantial damage in the event of a moderate to large earthquake. The actual condition of the structure's lateral force resisting system can only be determined via an in-depth analysis.

June 23, 1995

We are pleased to provide you with this evaluation of the existing warehouse. If you have any questions or if we can be of any further assistance in providing additional analysis or strengthening options, please call.

Sincerely,

Coughlin Porter Lundeen, Inc.

Steven J. Savage, PE

Proposal for Limited Services

TO Douglas Management Company

DATE

June 23, 1995

P.O. Box 3757

PROJECT

Warehouse at 7100 2nd Ave SW

Seattle, WA 98124-3757

ATTN. Christel F. Holm

BY

Steve Savage

This proposal is to confirm our understanding of the scope of services and compensation for this project.

The scope of services to be provided is limited to a site visit to determine the structural integrity of existing rigid frame foundation ties. We will provide you with a letter summarizing our findings.

The client agrees to compensate Coughlin Porter Lundeen, Inc. within 30 days of receiving the billing statement(s). We estimate an amount, based on our hourly rates, of approximately \$ 250 will be required. However, we cannot guarantee a maximum amount. We will notify you prior to performing any work exceeding the estimated amount. We will charge for miscellaneous expenses at 1.10 x our costs.

Interest is charged at 1 percent per month on balance due for payments not received within 30 days of invoicing.

The client agrees to limit the Engineer's liability for errors and omissions to the amount of the fee for services.

Please sign this document and return a copy so that we may proceed. If you authorize us to proceed prior to receiving a signed copy, we will do so, assuming agreement with this document.

Steven I Savage P

For Douglas Management Co.

Date

COUGHLINPORTER LUNDEEN

Proposal for Limited Services

TO Douglas Management Company

DATE

June 23, 1995

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COUGHLINPORTERLUNDEEN

Fax Cover Sheet

Company:

Douglas Management Co.

Date:

June 23, 1995

Attn:

Cluistel F.Holm

Project:

7100 2nd Ave SW

Fax No:

243-8415

Project No:

By:

Steve Savage

Tel:

343-0460

No of Pages (including cover): 2

Original will follow.

Comments:

Here is our Proposal for the structural evaluation of the Warehouse at 7100 2nd Ave SW. Please call if you have any questions.



Lynden Incorporated

P.O. Box 3757 Seattle, WA 98124-3757 FACSIMILE COVER SHEET (206) 241-8778 (800) 426-3201 Fax (206) 243-8415 NO. OF PAGES (including this cover sheet) PLEASE DELIVER THIS TRANSMISSION TO: NAME STENEN SAVAGE COMPANY CONGILLIN PORTER LANDERSON
CITY SEATTLE FACSIMILE NO. 343-S691 COMMENTS: PROPOSAL FOR SERVICES AT 7100 2ND MIZ SW recratiso, DOCUMENT FROM: NAME CHRISTEN YOU COMPANY _____ FACSIMILE NO. 206/243-8415 TELEPHONE NO. 206/241-8778

If you do not receive all pages, please call immediately.

This facsimile communication is intended <u>ONLY</u> for the use of the addressee and may contain information which is privileged and confidential. If you are not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately and return the original by mail at our cost to: P. O. Box 3757, Seattle, WA 98124. Thank you!

We are transmitting on a Rapicom 210, Group I-III compatibility.

VIA FACSIMILE: 820-8475



June 16, 1995

P.O. Box 3757 Seattle, Washington 98124-3757 (206) 241-8778 Fax: (206) 243-8415

Steve Savage Coughlin Porter Lundeen 217 Pine Street, Suite 520 Seattle, Washington 98101 343-0460

Re: Property Located at 7100 - 2nd Ave. S.W.,

Seattle, Washington 98106

Dear Mr. Savage:

As I mentioned to you on the telephone this morning, we were advised by Jay Spearman, a consulting engineer, that the structural integrity of the warehouse located on the referenced property might be questionable. A copy of Mr. Spearman's letter is enclosed for your information.

The property is owned by Douglas Management Company and scheduled to be sold on June 30, 1995. Needless to say, it is critical for us to determine if the structure is defective before the sale, and therefore I appreciate your prompt scheduling of an inspection for Wednesday, June 21, 1995. George Williamson, who is our representative and familiar with the property will call you to arrange the inspection.

Very truly yours,

DOUGLAS MANAGEMENT COMPANY

Christel F. Holm

President

CFH:dc Enclosure

cc: Jim Jansen

George Williamson

C. Holm -

JAY W SPEARMAN

CONSULTING ENGINEER

MARINE

STRUCTURAL

ENVIRONMENTAL PERMITS

DI FYI JA.
PUS MITURN, MINORAL

(206) 820-1739 820.1740

FAX 820-8475

12040 - 98TH AVE. NE, SUITE 200 KIRKLAND, WASHINGTON 98034

June 5, 1995

Alaska Marine Lines P.O. Box 24348 Seattle, Washington 98124

Attention:

Mr. Lael Prock

Subject:

Former Reefer Building at 7100 Second Avenue SW

Dear Lael:

We are preparing an ALTA survey for the 7100 Second Avenue SW site. In case the ownership is going to change and the metal building is to remain, I take this opportunity to restate something I have mentioned verbally to Les, Craig, and Rod in the past. That is as follows.

Concern:

There is a chance that the trenches in the existing slab of the former reefer building may have eliminated the cross-tie of the rigid frames through the concrete slab. Any type of heavy snow load, crane load, or to a lesser extent, dead load, causes spreading of the steel rigid frames at the base. This can lead to serious over-stressing and other more severe consequences to the building structure. It also has the potential to become a hazard to material stored in the building or to personnel.

Explanation:

The column bases of the rigid frame are normally prevented from spreading by steel reinforcement placed in the slab. This reinforcement can be any one of a number of different configurations. It is usually either hairpin bars at columns or a continuous tierod across the slab between column bases.

Recommendation:

- If the building is to be demolished in the near future, and if the building is vacant prior to demolition, the owner may determine a problem does not exist.
- If the building is to be retained, it should be determined how the base thrust is transferred across the span.
 - A. The Seattle DCLU may have some permit drawings or calculations on file that will explain the design. This involves research and interpretation.

- B. Les Candee may have some recollection of what was discovered during gutter construction.
- C. As a last resort, a limited exploratory demolition of the slab may be appropriate.
- If repair is judged appropriate, an engineered repair is recommended.

If there are any questions, or if we can be of any further assistance in this matter, please don't hesitate to call.

Very thuly yours,

ay W. Spearman, Consulting Engineer

JWS/lms